## AMENDMENTS TO THE CLAIMS

A3

1. (Currently amended): A method for managing data self-dofining data elements comprising:

providing a data element that includes metadata within said data element; associating a data element with metadata;

storing data management information in the metadata, said data management information for managing said data element;

storing, within said data element, providing one or more anchor points to begin selected analysis processes; and

storing data management rules and processing rules in the metadata.

- 2. (Original): The method of claim 1, wherein the management information comprises a time stamp.
- 3. (Original): The method of claim 1, wherein the management information comprises a management rule.
- 4. (Original): The method of claim 3, wherein the management rule comprises one of performance criteria, reliability criteria, availability criteria, and capacity criteria.
- 5. (Original): The method of claim 1, wherein the management information comprises a pointer to a management rule.
- 6. (Original): The method of claim 1, wherein the management information comprises a sequencing rule.
- 7. (Original): The method of claim 6, wherein the sequencing rule comprises one of a logical rule, a time rule, and a structure rule.

- 8. (Original): The method of claim 1, wherein the management information comprises a pointer to a sequencing rule.
- 9. (Original): The method of claim 1, wherein the management information comprises a management function for accomplishing management rules.
- 10. (Original): The method of claim 1, wherein associating is accomplished by physically storing the metadata with the data.
- 11. (Original): The method of claim 1, wherein associating is accomplished by storing a pointer with the data that allows one to locate the metadata.
- 12. (Original): The method of claim 1, wherein anchor points are pointers to the current location the metadata for selected data elements.
- 13. (Original): The method of claim 1, wherein anchor points are copies of the metadata for selected data elements.
- 14. (Original): The method of claim 1, wherein processing rules define the order of selecting data elements for processing.
- 15. (Original): The method of 1, wherein processing rules define controls for processing management information for each data element.
- 16. (Original): The method of claim 15, wherein the processing controls include sequential processing in priority order.
- 17. (Original): The method of claim 15, wherein the processing controls include indexed processing following specific tree structures first.

- 18. (Original): The method of claim 15, wherein the processing controls include parallel processing.
- 19. (Original): The method of claim 18, wherein parallel processing includes a separate instance of processing for each data element found processed simultaneously.
- 20. (Original): The method of claim 18, wherein parallel processing includes a separate instance of processing for each data element found processed concurrently.
- 21. (Original): The method of claim 1, wherein management information comprises a pointer to the location where rules are stored.
- 22. (Original): A self-defining data element for enhanced data management and recovery, comprising:
  - a data portion; and
  - a metadata portion,

wherein the metadata includes management information including management rules and processing rules and one or more anchor points to begin selected analysis processes.

23. (Original): The self-defining data element of claim 22, wherein the management information comprises a time stamp.



- 24. (Original): The self-defining data element of claim 22, wherein the management information comprises a management rule.
- 25. (Original): The self-defining data element of claim 24, wherein the management rule comprises one of performance criteria, reliability criteria, availability criteria, and capacity criteria.



- 26. (Original): The self-defining data element of claim 22, wherein the management information comprises a pointer to a management rule.
- 27. (Original): The self-defining data element of claim 22, wherein the management information comprises a sequencing rule.
- 28. (Original): The self-defining data element of claim 27, wherein the sequencing rule comprises one of a logical rule, a time rule, and a structure rule.
- 29. (Original): The self-defining data element of claim 22, wherein the management information comprises a pointer to a sequencing rule.
- 30. (Original): The self-defining data element of claim 22, wherein the management information comprises a management function for accomplishing management rules.